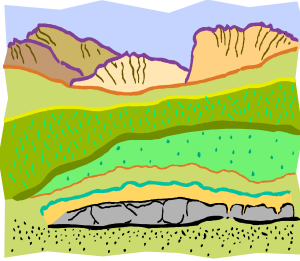




Patty's Plants



What are Micronutrients and Macronutrients?



Macronutrients and micronutrients are essential for healthy plant growth. There are 16 proven elements found in plants.

*The macronutrients are nitrogen, phosphorus, potassium, calcium, magnesium and sulfur. NPK or nitrogen, phosphorus and potassium are the primary nutrients. They are always listed first in fertilizers because plants use very large amounts of them. They are also used up the fastest in your soil. That's why we need to amend our soil with fertilizers or by adding organic materials to it. Calcium, magnesium and sulfur are called the secondary nutrients. They aren't used as fast so they stay with the plant or in the soil longer. All 6 of these nutrients are the leaf or root cells of a plant.

*Micronutrients are essential for the plants growth. They are only needed in small amounts. That's why they are called the "minor elements". The 7 micronutrients are boron, chlorine, copper, iron, manganese, molybdenum and zinc. Micronutrients add more mineral content to the plants.

There are also 3 non-mineral nutrients. They are hydrogen, oxygen and carbon. They are found in the process called photosynthesis. They turn into starches and sugars which are the plants food. These are made from when the plants use the energy from the sun. Just like us plants need more than food and water to be healthy, they also need minerals and vitamins to survive.

That's why a good balance of the 16 elements are so important. We can purchase fertilizers with most of these elements in them, just read the labels.

If you want to make your own organic compost use these materials for a great balance of nutrients.

*Garden refuse, green leaves/weeds, fruit/vegetable trimmings, manures, and grass clippings are all green nitrogen-rich materials.

*Sawdust/straw ,chopped prunings, shredded paper, shredded cardboard, paper towels/tissues, pine needles, dry leaves/weeds, coffee grounds/teabags are all carbon rich material.

If you would like to find out exactly what your soil has in it, do a soil test. There are soil test kits available on-line or at your local garden shops. You can also contact your local county extension office and they can tell you how to take a soil sample and send it in to be tested.

www.pattysplants.com or e-mail me at: patty@pattysplants.com